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VOUGHT CORSAIR AIRPLANE TEST IN THE 30- by 60-FOOT TUNNEL

On May 27, 1931, the National Advisory Committee for Aeronautics (NACA) dedicated its new "Full Scale" wind tunnel. The Navy Vought O3U-1 was the first complete aircraft to be tested in the 30- by 60-Foot Tunnel. It was used to demonstrate the new tunnel during the dedication ceremony which was held during the National Advisory Committee for Aeronautics 6th Annual Aircraft Engineering Research Conference.

The aircraft is mounted on the "balance." This is a floating platform connected to the instruments which measure the aerodynamic characteristics of an airplane. Below the platform, the Toledo scales used until the tunnel closed, recorded the lift, drag, pitch, roll and yaw of the airplane being tested.

Built to test full-scale models or actual aircraft, the 30- by 60-Foot Tunnel was an innovative concept in wind tunnel design. It proved especially valuable during World War II as a majority of the nation's bombers and fighters (as well as several foreign aircraft) were tested in this tunnel. Since the 1970s, one of the unique test techniques used in the "30- by 60" was free-flight of dynamically scaled models in the test section. This technique allowed researchers to measure and assess flight characteristics as well as control options. The "30- by 60" is an example of a major facility adapted to serve a multitude of uses not originally visualized.

The "30 by 60" remained as one of NASA's largest wind tunnels until its closing in September 1995. In 1985 the 30-by 60-Foot Tunnel was designated a National Historic Landmark.

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